1. INTRODUCTION

This guide will help you find and learn the dialing codes, so that you can use your CRYSTAL EPABX system exactly the way you want it. Take a little time to read through it and try out some of the codes on your extension.

1.1 Extension Telephone

Electronic push button instruments approved by DOT should be used on the CRYSTAL EPABX. You may use either pulse or DTMF phone on any extension.

1.2 Power Failure

In case of power failure and UPS not attached to the system, the EPABX operates in power-fail mode. Intercom operation stops and all trunks are connected to different extns directly. Calls can be made from these extns. Incoming calls will come on respective extns. This helps to maintain communication with the outside world even during dark outs.
The table below shows how various extns are used as power down extns:

Trunk	Extn.
61	201
62	202
63	207
64	208
65	213
66	214
67	219
68	220
69	225
60	226

When mains returns, normal operation shall resume. Changeover from normal to power fail operation and back, is automatic.

1.3 Optimum utilisation

The ring and ring back tones are automatically shut off if the called party does not reply within approximately 45 seconds. Similarly, the dial tone/busy tone are also shut off after approximately 5 seconds.

2. INSTALLATION & COMMISSIONING

2.1 Requirements

Installation should be done by authorised & trained personnel only in compliance with D.O.T. (Indian Deptt. of Telecommunication) standards.

2.2 Site requirements

CRYSTAL is designed to work in a normal office environment. The unit should be sited beside's the operator in the reception area and should be away from :

- Processes producing electricity, fumes, dust, gasses or radiation (e.g. silicon or halon contamination from photo copying or fire protection equipment)
- Electrical meters or switchgears
- Water pipe, gas meters, pipes or appliances
- Dampness
- Vibration

2.3 General

Ensure a good power point for the exchange with a 5 pin socket & switch. If possible, the customer should be asked to provide a " clean" power supply direct from the power distribution board. CRYSTAL is set to work at 220V AC, 50Hz mains supply.

Establish a firm ground outside the building. The ground resistance should be within tolerance limit. Connect this ground to earth terminal on the MDF.

NOTE :

A good earth is very essential for protection of junction lines and proper functioning of the system.

WARNING: ANTI-STATIC PRECAUTIONS MUST BE TAKEN WHEN WORKING WITH THE CARDS OR COMPONENTS OF PIGEON EPABX.
CAUTION: Never insert or pull cards from the equipment with the "power on" under any circumstances. In fixed systems, do not pull out or insert any flat cable during power ON.

2.4 Commissioning checks

Power-up CRYSTAL system and carry out the following checks:

A) On each extension check:

Internal dial tone

Dialling

Ringing

B) Seize each outside line circuit in turn, dialing 61 for the first circuit, 62 for the second, etc. & check that the line seized LED operates.

C) From a DOT extension dial a Jn. number and verify that calls are successfully landing on the main equipment and properly transferred to local extensions. Repeat for all external lines.

D) Switch off the exchange. Check the power fail extension for external dial tone. These extensions should be able to dial out and receive respective incoming calls directly.

The exchange once installed and put into operation needs little routine maintenance. Any line fault can be isolated at the MDF, and exchange faults can be isolated at the card level. Faulty cards can be replaced with service cards while they are repaired at authorised maintenance centre to minimise system down time.

NOTE:

1) **For lightning/high voltage protection, it is necessary that you install protection device on all Jn lines and overhead extension lines. Damage caused on CRYSTAL systems due to high voltages is not covered under warranty.**

2) In case of a fault on the main equipment which results in the outside line getting held up, immediately isolate the outside junction line by removing the junction line wires.

3. NUMBERING SCHEME

Extension numbering is three digit starting from 201, 202.... Junction numbering is 61, 62.... 69, 60. Further 40 ZX is100% flexible in terms of Jn line / extn. line combinations -- i.e. simply by using appropriate cards, one can configure 1030 system as 2+38 or 4+36 or 6+34 and so on.

To enable above flexibility there are two types of line cards 2+6 type (i.e. 2 Jn and 6 extn.) and 0+8 type (i.e. ..8 extn. only). Any type of card can be plugged into any slot. (Do not use 0+8 card in the Ist slot. This Ist slot is reserved for 2 + 6 card only.) However, if 2+6/0+8 cards are used, then first all 2+6 cards will be inserted followed by all 0+8 cards. The numbering scheme for various options shall be as follows :

1st slot

2+6 line card	Jn 61, 62
	EXTN 201, 202, ... 206

2nd slot

2+6 line card	Jn 63, 64
	EXTN 207, 208, ... 212
0+8 line card	EXTN 207, 208, ... 212, 233, 234

3rd slot

2+6 line card	Jn 65, 66
	EXTN 213, 214, ... 218
0+8 line card	EXTN 213, 214, ... 218, 235, 236

4th slot

2+6 line card	Jn 67, 68
	EXTN 219, 220, ... 224
0+8 line card	EXTN 219, 220, ... 224, 237, 238

5th slot

2+6 line card	Jn 69, 60
	EXTN 225, 226, ... 230
0+8 line card	EXTN 225, 226, ... 230, 239, 240

4.BELLS AND WHISTLES

This section describes the ringing pattern of extension phone. Some of these tones will be familiar, others may be new to you.

4.1 Ringing patterns

Your extension phone will ring with a different cadence (ringing pattern), depending on the type of call waiting to be answered, as shown:-

Internal Call

Executive ring

External Call

Alarm Call

Door Phone Ring

4.2 Tones

To get a demonstration of the various tones, dial from any extn.,

☞ **Users password (By default 89 1111),** now

Dial

For dial tone	**761-1**
For ring back tone	**761-2**
For busy tone	**761-3**
For error tone	**761-4**
For confirmation tone	**761-5**
For programming tone	**761-6**
For warning tone	**761-9**
For music	**761-0**

To come out of demonstration mode,

☞ **Dial 0**

NOTE:

Each tone shall be heard for about 20 seconds.

5. HOOK FLASH

You shall have to use the "Hook-Flash", prior to dialing any facility code.

Hook flash (HF) is a gentle/ slow tap of the cradle switch. After HF, you shall get a slow acceptance tone.

Ex. To transfer a P&T call -

☞ **H/F** (You shall get acceptance beeps)

☞ **Now dial extn. no. and your call is transferred.**

5.1 The Thumb-Rule for using Hook Flash

Whenever dialing any extn. number or code from - dial tone/call forward dial tone/engaged tone, dial straight away.

For dialing extn. number or facility code from ring back tone / conversation mode, first HF and then dial the required number.

NOTE:

1. After completion of any call (internal / external) replace handset for minimum 1 sec for disconnection, before going off hook for the second call.

2. If your instrument is provided with a flash key, enquire the timing of key from your system manager / dealer. If it is below 100 milliseconds, do not use this key (it shall be ignored by the system). You may use the cradle switch for HF. If the timing is between 100-900 msec, you may use this flash key for HF.

3. If while transferring a P&T call, you press any wrong code / extn. no. do not panic. You can HF anytime. You shall come back in speech mode with P&T call. Now, proceed again.

6 MAKING CALLS

6.1 Internal calls

When you pick-up your phone, you will hear internal dial tone, then :

☞ **Dial extension number**

Extensions are numbered 201 onwards.

6.2 External Calls

Dialing 0/5 automatically gives you an free outside line by rotation. The public dial tone will be different from the internal tone on your CRYSTAL system. So, to make an outside call:

☞ **DIAL 0**

✆ **Wait for trunk dial tone**

☞ **Dial the required external number**

If for any reason you want to use a specified exchange line to make call,

☞ **DIAL XX**

Where XX is the number of the exchange line (i.e 61 for line no. 1, 62 for line no. 2 and so on)

✆ **Wait for P&T dial tone**

☞ **Dial the required external number**

Instead of getting trunk dial tone, if you get:

A. CRYSTAL ERROR TONE : This means that your extension is locked from making that type of call.

B. CRYSTAL ENGAGED TONE: It indicates that the junction number is busy.

NOTE:
Do not pause for more than 5 seconds between digits when dialing. After you finish dialing, you must wait for 5 sec. before you dial any facility code (e.g.to transfer a call to another extension etc.)

7. USERS PROGRAMMABLE FEATURES

Following features/modes can be accessed or changed by any user, provided he knows the users password :

a) All printing commands

b) Day/Night/Auto mode chageovers

c) Forced call disconnector

To enter users programming mode, dial users password

☞ **89 1111**

Now, you can change/access above features. To come out of programming mode,

☞ **Dial 0**

NOTE:

Above password of '1111' can be changed from the main programming mode.

8. INCOMING TRUNK LINE HUNTING (ROUND ROBIN)

Your system can be programmed such that, incoming P&T calls shall ring directly on the subscriber telephones.

8.1 Round Robin Patterns

A) ROUND ROBIN

The incoming calls shall land directly on the subscriber telephones as per instructions programmed into the system. If an incoming call is not answered within five rings, then the next extn. (as programmed) will ring or, will hear call waiting tone, if busy. A maximum of 5 subscribers can be programmed to ring in a cyclic manner for each junction.

B) DELAYED SIMULTANEOUS

On an incoming call the 1st extn. shall ring. If this extn. does not respond within 5 rings then all balance extns of that group will start ringing simultaneously. Any extn going off hook will get connected to the call.

C) IMMEDIATE SIMULTANEOUS

In this mode, on an incoming call all extns of the group will ring simultaneously.

D) R-ROBIN OFF

In this mode only 1st extn of the programmed group will keep on ringing.

A junction can be set for any of the above four types of ringing pattern separately for day/night mode.

9. PARKING CALLS

This is the way of putting external calls on hold, so that you can use your extension for making or answering other calls. To park the external call :

☞ **H/F and Dial 5**

You shall get back the dial tone and the call will be parked on your extension. You can now, for example make or answer outside call.

9.1 Pick Up Of Parked Calls

If you have parked 2-3 calls on your extn, you can selectively pick them as follows -

Dial 15X
where X = 1 for Jn 61
2 for Jn 62
0 for Jn 60

To randomly pick any parked call, dial

15*

NOTE:

A. Any number of external lines can be parked by dialing 5.

B. In any case, if you have parked a call, you may hang-up your phone. The call will automatically ring you back after 30 seconds. Do not worry that you may forget or loose parked calls.

10. CALL TOGGLE

When you are in conversation mode and hear intrusion beeps (be it of an intercom call or incoming round-robin call) you can toggle between the present call & the incoming call by

☞ **Flash 1**

Whenever you dial flash 1, the current call will go on hold & you shall be connected to the new call.

You can toggle any number of times by flash 1 between the two calls.

11. CALL TRANSFER

11.1 Internal Call Transfer

When you are talking to an internal extension and wish to transfer the call to another extension :

☞ **HF & dial the desired extension number where the call is to be transferred.**

✆ **Wait for extension to answer.**

☞ **Hang-up.**

The call is transferred.

11.2 External Call Transfer

When you are talking to an outside number, and wish to transfer the outside call to another extension:

☞ **Hook flash**

✆ **You shall get acceptance beep.**

☞ **Dial extn. number.**

Outside party goes on hold and gets music tone, and you shall get ring-back tone.

☞ **Replace handset**

The call is automatically transferred to the desired extension. In case the called extn. does not respond within 30 secs. the call shall revert back to you.

Alternately,

☞ **Dial the desired extension number where the call is to be transferred. Outside party automatically goes on hold and gets a music tone.**

✆ **Wait for the extension to answer. Announce the call.**

☞ **Hang-up.**

The call is automatically transferred.

A. In case the called party (Internal extension) does not want to talk with the P&T line and hangs up, you will be automatically connected back to the outside line.

B. In case the desired extension does not respond, to return to the outside call,

☞ **Hook flash**

You are connected back to the outside line.

11.3 External call Transfer to a busy extension

A) While transferring any junction call to a extn, on getting busy tone simply

☞ **Go on hook**

The call will be camped on the busy extn., and the busy extn shall keep on getting call waiting beeps. The busy extn can toggle between the existing call & the transferred call on hold by

☞ **Flash 1**

NOTE :
This mode of transfer does not work if the extn. is in dialing mode.

For conference between both calls,

Dial

☞ **H/F + 0**

Alternately, on getting waiting beeps, if the busy extension disconnects, then the transferred call shall ring back on his extn.

B) If the call being transferred is urgent, then on getting busy tone

☞ **Dial 83**

On dialing 83 you shall get music, and then you shall be connected to the dialled extn. Announce the call & hang up. The busy extn. will be connected to the transferred call & the existing call with which the extn was speaking will get camped. The busy extn can now toggle between the two calls by

☞ **Flash 1**

NOTE :

1) While transferring, if the extn. goes no reply or is busy and you want to get back to the call-simply **H/F.** You shall be connected back to the external call and now proceed again.
2) If already any call is parked/camped on a extn., you cannot transfer another call to that extn.

12. CALL PICK UP

12.1 Internal call pick-up

If any other extension phone is ringing for an internal call, to answer it from your non-ringing phone,

☞ **Dial 76XX**

Where XX is the extn. number of the ringing phone.

12.2 Common Call Pick-up

If any other extension in your hunting group is ringing, to pick it up from your extension,

☞ **Dial 4**

You shall be connected to the calling extension.

NOTE :

Alarm call ringing on a particular extn. cannot be picked by any other extn.

13. EXTENSION NAME

You can programme the user name for each extension. If your CLIP phone supports Alpha-Numeric display (ie-Name and Number), both name and number of the caller shall be displayed, for any extn to extn. call.

13.1 Programming Of User Name

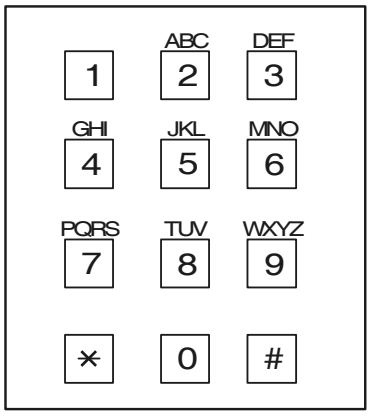
To programme the user name of some other extn.,dial from dial tone

☞ *** 19 + Extn. H/w Port + 1 + Name (max 16 Digits) + #**

To programme user name of self extn. , dial

☞ *** 12 + Name + #**

The alphabets against each number in a normal Push Button Telephone are as follows.



Ex : To set Anil for extn 201, dial

A N I L

☞ *** 19 + 01+ 1+ 2 66 444 555 + #**

Note : It the alphabets are on the same digit, than press * to copy the 1 st alphabet to next location.

i.e 2 = A
*2 = B
*22 = C

Ex.- ABC Will be

A B C
2 *2 *22

AAA will be

A A A
2 * *

DEEPAK will be

D	E	E	P	A	K
3	*3	*3	7	2	55

13.2 Checking Of Extn. Name

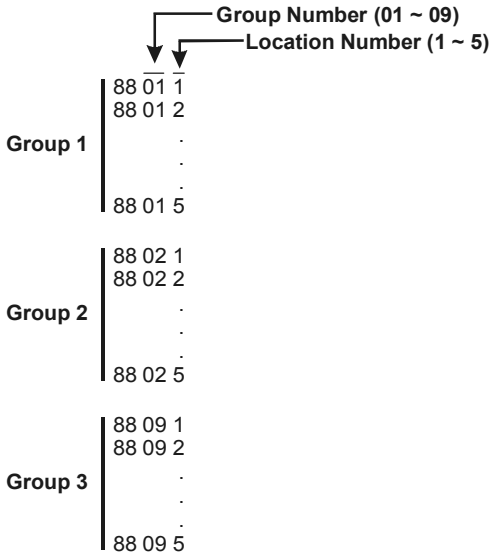
If you have any KTS installed ,you can check the name programmed against any extn. To do so, dial (from dial tone) from any KTS instrument -

☞ *** 16904 + Extn number.**

The name shall be displayed on the LCD display.

14. ABBREVIATED DIALING

Abbreviated (memory) dialing lets you dial outside number using only 5 digits instead of having to remember the whole number. Each extension can store up to 9 groups of telephone numbers (with 5 numbers in each group) in their personal memory banks. The numbering scheme of this bank is as follows.



Each group can also be assigned with a user name. Whenever there shall be an incoming call from any number programmed in the personal \ global memory bank, the name corresponding to this number shall be displayed on the CLIP phone.

Further, against each external number of the above bank, you can define an extension number for "CLI Based Call Routing" feature

14.1 Storage of Telephone Number

To store an external number, dial (from dial tone)

☞ *** 18+ Group No (01~09) + Loc. No (1~5) + Jn. No (1~0) + External No + * + Call Routing Extn. No + #**

Ex.-
- 01127949260 is to be stored at loc 88011
- It should be dialled out from jn 62
- Any incoming call from this number should be forwarded to extn 204.

☞ **Dial 18 01 1 2 01127949260 * 204 #**

To dial out this number ,simply dial - **88011**

Note :

1) If you do not want any call routing Extn. no, then simply dial **#** after *****

2) If you are not particular to dial out a stored number on any specific junction line, you may programme junction number as 0 or 5. In such case, on dialing 88011 or 88012 etc., your stored number shall be dialed out on any free Jn. line (in 0 group or in 5 group).You cannot store any number specifically on junction number 60 and 65

14.2 Global Dialing

Apart from personal memory bank, there is a central memory pool of 90x5 (450 numbers) at location **88101** to **88995**, which can be commonly accessed by all extensions. For storing of number in the central pool, reffer programmers guide

Numbers stored in the global pool, termed emergency numbers, can be dialed out by all extensions irrespective of their class of service. Further, this global pool can be divided into two banks-**88101 to 88545** and **88551 to 88995**. Now any of the above bank can be allowed/denied access to any extn. (Reffer Prog. manual).

14.3 Storing Of Name

To feed a name against any personal number, dial (from dial tone).

☞ *** 19+ group No (01~09) + 2 + Name +#**

To feed a name against any global number, dial (from dial tone)

☞ *** 19 + Group No (10~99) +2+ Name #**

14.4 Checking Of The Programmed Name

To check the name against any personal number, dial from any KTS instrument

☞ *** 169 +05+ Extn. H/W port + Group No (01~09)**

To Check the name against any global number, dial

☞ *** 169 + 05+ 41+ Group No (10~99)**

15. AUTOMATIC RING BACK

If an extension is busy so that you cannot get through it, you do not have to keep trying the number. You can ask the CRYSTAL system to redial it automatically for you when it becomes free.

15.1 Auto-ring back on internal lines

If you dial another extension and get busy tone, to request a ring back:

☞ **Dial 7**

Hang-up.

When the extension becomes free, your phone will ring (for about 45 sec). Pick-up your phone. The extension you require will then ring, and when the user answers, you will be connected.

15.2 Ring back on exchange lines

If you dial 0/5 or 61, 62.. to get an outside line and get busy tone, meaning no outside line is available, to request a ring back:

☞ **Dial 7**

Hang-up.

When an outside line becomes free, your phone will ring. Pick-up your phone. You will hear public dial tone. You can dial the number you require without having to dial 0/5 again.

15.3 Auto Ring back on No-reply Calls

If you dial for any extn. number and do not get a reply (meaning that the called party is not on his table), you can set for an auto ring-back. As soon as the called party first lifts his handset and goes on-hook, your extn. will ring. As soon as you pick up your phone you will be connected to the dialed extension. To set above facility:

☞ **HF and Dial 7** (While ring is going to the called extn.)

Hang-up.

To cancel any of above auto call back, dial

☞ **70**

16. CLI BASED AUTO CALL ROUTING

Provided you have a CLIP card installed in your system, you can utilize this feature for direct landing of incoming call's on desired extension, w/out any operator assistance.

For a 10+30 system, a total of 1800 external numbers (2160 for 2+38 system) can be programmed in personal / global bank. Against each of these 1800 numbers, you can programme any extension number. Now whenever there is an incoming call, CRYSTAL system shall search this entire bank of 1800 numbers. If the incoming number matches with any of these 1800 numbers, it shall then check for the extn. number programmed against this external number and accordingly forward the call directly to this extension

17. DISPLAY OF NUMBER / NAME ON THE CONSOLE

If you have DSS-30 and have programmed caller names in the personal / global memory , you have an option for display of either the caller number or the name , on any incoming call. (refer prog manual for this)

18. VIEW OF INTERNAL / EXTERNAL NUMBER OF A BUSY EXTN

If you have a CLI / KTS phone and if any extn is busy , you can know the internal / external number (be it incoming / outgoing) with which that extn is busy.

To view from a KTS

☞ **Dial**

You can now view the number in the message folder

To view from a CLIP phone

☞ **Dial extn no. and on getting busy tone , simply go on-hook**

The number shall be displayed on your phone

Note:
External number display is available only if a DTMF CLIP card is installed in the system

19. LEAST COST ROUTING

With LCR feature disabled, you can dial out normally by 0/5/61,62.....

With LCR enabled, to make an external call dial

☞ **0 + External number + #**
As soon as you dial above, system shall select the junction with the cheapest service provider for this number and dial out the same.

Note :

1) Even with LCR enabled, an extension can be allowed/disallowed dialing through a specify junction by 61, 62.....
2) Console cannot avail this LCR feature.
3) Even if you do not dial # after the external number, system shall dial out after a predefined time out.

20. CONFERENCE CALLS

There are three types of conference calls,those involving an outside line, those involving internal and outside line and those involving only internal extensions.

20.1 Internal

When on an internal call, to bring third extension into conference.

☞ **H/F & dial the desired extension number.**

When the extension answers announce conference and

☞ **H/F & dial 0**

A conference call involving three extensions is established.

20.2 Internal with P&T

One external call can be brought into conference with two internal lines. When you are on an outside call, to convert it into a 3-way conference :

☞ **H/F & dial extension number to be added for confer ence.**

The outside line goes on hold & gets music tone.

✆ **Wait for the extension to respond and announce con ference.**

☞ **H/F & Dial 0**

Three party conference is established.

NOTE:

For conference, the extn. initiating conference should be in the group with conference feature enabled. (Refer to programmer guide)

20.3 P&T with internal

Two P&T calls can also be brought into conference with any one internal extension. To establish a conference :

When in conversation with 1st junction,

☞ **H/F and Dial 8**

✆ **Your reciever shall remain silent.**

Now, seize 2nd junction by either '0' or 61/62 (not by '5'). When in conversation with the second call,

☞ **H/F and Dial 0**

A three party conference is established.

NOTE:

Once in conference, you cannot transfer or park these calls again.

20.4 Unsupervised conference

Two P&T calls can be brought into conference without any internal extension also. To establish a conference :

When in conversation with 1st Jn.

☞ **H/F and dial 8**

✆ **Your receiver shall remain silent.**

Now, seize 2nd Junction. When in conversation with the second call,

☞ **H/F and dial 8**

You shall come out of speech mode, and the two junctions can continue talking. A warning beep is given after every 30 sec. wherein they can extend the call by dialing any digit from **0-9.**

To disconnect

☞ **Dial #.**

21. CALL DIVERSION

If you are going to be near another extension phone rather than your own, or if you wish to divert all calls made to you, to your secretary's extn., you can set your phone so that anyone dialing you will be put through to the other extension.

A call forward dial tone is always heard on the phone which has been diverted. This does not mean that you cannot use it for making calls.

21.1 Call Forward

To divert your calls to your secretary's extension from your own extension:

☞ **Dial 721 XX and go on hook**

Where XX is the secretary's extension number to which calls are to be diverted.

Anyone dialing your number shall land on your secretary's extension & the secretary can then transfer the call to your extn.

NOTE:

Whenever you lift handset you will hear call forward dial tone. Anyone picking up your phone will hear this tone until the diversion is cancelled.

When you no longer want your calls to be diverted, remember to cancel the diversion. You can do this from your own phone. For this,

☞ **Dial 70**

You will hear normal dial tone.

21.2 Call Forward (Only if your extn is busy)

With this feature, only when you are busy and anyone dials for your extn., the call will be automatically forwarded to the programmed extn. To set for above

☞ **Dial 724 XX**

Where XX is the extn no. where calls are to be forwarded.

21.3 Call Forward (If your extn goes no reply)

With this feature, if you do not respond to an incoming call within 20 sec. time, the call will be automatically diverted to the programmed extn. To set for above,

☞ **Dial 723 XX**

Where XX is the extn. no. where calls are to be forwarded.

21.4 Follow me

If you are temporarily away from your original extn. (say A) and you want all calls made to your original extn. to ring on your new extn. (say B):

Dial (From B)

☞ **722 XX YYYY**

Where **XX** is the extn. to be followed (i.e. extn. A)

YYYY is your extn password.

Any call now made to A shall land on B.

NOTE :

1) After setting for follow me,extension A shall hear call forward dial tone.
2) Follow me shall function only after you have changed your personal password (from default 1111)

To cancel :

From A

☞ **Dial 70**

22. REDIAL ON EXTERNAL LINE

If you are trying any external number and if the dialed number is engaged, you need not have to redial the complete number again. You can ask your PIGEON system to redial the number for you. To redial:

☞ **Dial #**

The junction through which the number was last dialed shall be seized ON and the number shall be redialed out automatically.

22.1 Auto Redial

If the external called number is busy, you can ask your CRYSTAL system to automatically redial the number for you. On getting busy tone, disconnect & from dial tone

☞ **Dial 711** (Auto Redial Low end)

☞ **Dial 712** (Auto Redial High end)

To cancel Auto Redial dial

☞ **70**

NOTE:-

1) Auto redial will stop whenever your extn. is busy & shall resume back as soon as it goes free.

2) Number of attempts for Auto Redial High end / Low end can be programmed seperately (reffer prog. manual)

3) Auto redial has to be allowed to required extns. from the class of service programming.

4 Only one number can be requested for auto redial at a time.

5) The system uses the same trunk type, used earlier. If the no. was dialed on group '0', the system shall take one of the group '0' trunks for auto redial. If the no. was tried on some selected trunk, the system uses the same trunk.

6) Auto redial may fail in following cases :

a) Junction line condition is very poor with lot of noise.
b) Called party lifts his handset immediately when his telephone rings (i.e. the EPABX does not get a chance to receive any ring back tone from the P&T).
c) The ring back tone from the telephone exchange is not of standard frequency and timings, or if there is a musical caller tone instead of normal RBT

22.2 Alternate Number Redial

If a company has 2 or more lines, you can utilize this feature. To do so -

1) Programme the numbers in 1st there levels of any personal/global memory bank group.

2) Enable alternate number redial feature (reff prog. manual)

Now whenever you make an out going call and on getting busy tone, if you dial # or 711 , Crystal PBX shall search this number in the complete global/personal bank. If the number is located in any group, it shall dial out the number from the next level of this group. It shall keep on trying the number's of 1st three levels of that group in a rotational manner, untill the call is through.

Example :

- There are five numbers in a company.
- 27923766, 27921267, 27949260, 27923985, 9312524523
- 1st three numbers are common
- 4th is fax
- 5th is a cell number

(you shall not want 4th \ 5th number in alternate number group)

Programme

27923766	**in**	**88101**
27921267	**in**	**88102**
27949260	**in**	**88103**
27923985	**in**	**88104**
9312524523	**in**	**88105**

Now whenever you shall dial 27923766 & find this number busy and if you dial # or 711, Crystal PBX shall try next two numbers in a rotational manner. If you want to call to the fax / mobile number, dial 88104 / 88105

This alternate number dialing feature can be enabled / disabled. (Reffer prog. manual)

23. HOOK FLASH ON TRUNK LINE

In new electronic P&T exchanges a call waiting tone is provided when a second call is coming in. A **Hook Flash + 2** puts the 1st call on hold & connects you to the 2nd call & **Hook Flash +1** puts the 2nd call on hold and puts you to your original call. To provide this hook flash +1 / 2 through the EPABX, while you are on any external call & hear the trunk call waiting beeps in the background:

☞ **H/F and dial #**

Now if you dial

☞ **Flash 1 or Flash 2**

It shall be passed on to the junction line.

Example : To receive a 2nd call

☞ **Dial Flash #**

Now,

☞ **Dial Flash 2**

24. CALL INTRUSION

If any important or priority message is to be passed on to an extension which is busy, you can break into the busy extension. Short warning beeps are sounded to caution the extn. that their call is being intruded.

24.1 Barge-in

To pass on any message,

☞ **Dial desired extension number (say A).**

After getting busy tone,

☞ **Dial 83**

The busy extension (A) will get a warning beep and you will get music for 5 seconds. After that you shall be connected to the busy extension. The 3rd extn. will go on hold & get music tone. The busy extn. (A) can toggle between the two extns by **Flash 1.**

NOTE :

Barge - in shall not work if the busy extn. is in conference mode / dialing mode / ringing mode.

24.2 Monitor

With this facility you can monitor the conversation of two extensions without any indication (beeps) to the conversing extensions. To monitor:

☞ **Dial extension number.**

After getting busy tone,

☞ **Dial 80**

You can now monitor the conversation between the busy extensions.

25. DAY/NIGHT MODE

For a number of features like –Round Robin / ISD, STD, dialing / feature groups etc. different groups can be programmed seperately for day/night modes. You can switch over manually between the two modes as follows :

Dial users password (default 1111)

☞ **891111**

You shall get acceptance tone.

Now,

Dial

☞ **851 for day mode**

☞ **852 for night mode**

Alternately, you can programme a set of timings seperately for seven days of the week for the system to automatically switch over between the two modes.To programme the timings, refer to the programmers guide.To set the system for auto mode,

☞ **Dial 853**

Now,

☞ **Dial 0**

to come out of programming mode.

26. HOTLINE

This feature comes in useful when a particular extension / junction is to be used continuously and repeatedly over period of time.

26.1 Extension Hotline

☞ **Dial 161+XX+Y**

Where XX = extn number.

Y = time delay (2~ 9 Sec.) after which you want the ring to start.

26.2 Jn. Hotline

☞ **Dial 162 + Jn. number + delay time**

NOTE :

1. As soon as you lift your handset, you will be connected to the desired junction. Now, you can straight away dial the required number.
2. Jn. number '0' and '5' cannot be selected for hotline.

26.3 Jn. number hotline

If you wish that a particular external number be dialed automatically, as soon as you lift your handset,

☞ **Dial 163 + Jn. no. + delay + external number + #**

Example : If you wish that number 732123 is to be dialed out from jn 62 after 5 sec. of lifting your handset then,

Dial

☞ **163 2 5 732123#**

To cancel any type of hotline

☞ **Dial 160**

NOTE:

Use 1 for Jn line 61, 2 for 62 & 3 for 63 & so on.

27. ALARM CALLS

You can use your PIGEON system as an alarm clock, for example to remind you that an appointment is due.

At the specified time your extn. will ring, and as soon as you go off hook, you shall get music, to remind you of your alarm. In case you fail to lift your handset, your extension will continue to ring for 90 seconds. If still your extension goes unanswered, the operator's extn. (extn 21/201) shall get an alarm ring.

27.1 One Time Alarm

To programme your telephone to ring at specified time

☞ **Dial 782 HHMM**

Where HHMM is the time.

Example : For an alarm at 4.05 pm,

☞ **Dial** 782 1605

When your alarm is due, your phone will ring. When you lift, you will get music tone. If your extension is busy at that time, it will ring as soon as you go on hook.

27.2 Repeat Alarm

Alternately you can set your extension to ring daily at the specified time.

To programme a repeat alarm :

☞ **Dial 783 HH MM**

Your extn. shall now ring daily at this specified time till it is not cancelled.

To cancel any of the above alarms:

☞ **Dial 780**

27.3 Duration

If you want your extn. to ring after a specified duration,

☞ **Dial 781 XX**

where XX is the time from 01 to 99 minutes.

27.4 Alarm Remote

To set alarm for some other extension

☞ **Dial 784 XX Y HH MM**

Where **XX** is the extn. no. for which the alarm is to be set

Y is alarm code (i.e. 2 for one time alarm / 3 for daily alarm)

Example : To set one time alarm at 5.10 pm on extn. 24 **Dial,**

☞ **784 24 2 1710**

To cancel all alarms,

☞ **Dial 780**

NOTE:

Each extension can individually set any one or all three alarms simultaneously.

28. DYNAMIC LOCK

To prevent misuse during your absence, you can lock your extension to allow only local or no external calls at all.

28.1 To Set Dynamic lock

Dial

☞ **81 + XXXX + Y + ZZ**

Where XXXX = your extn. password (Default is 1111)
Y= Accepted / denied table level
ZZ = time in min after which you want your extn. to be locked (01~99 min)

Note :

1) In open condition system shall check only the 94 level. In locked condition, system shall check both 94 level and the level set in dynamic lock.

2) If any extn. is programmed for level 3 in 94 programming then that extension can set for levels lower than 3 only (i.e.0,1,2) for dynamic locking

28.2 To open lock

To open dynamic lock, dial

☞ **82 + Password**

To Change Password

Dial

☞ **86 + XXXX YYYY**

where XXXX = old password
YYYY = new password

29. HUNTING GROUP

You can define ten hunting groups (of max. 8 extns each) which can be accessed by **370 to 379**. When anyone shall dial 370, 1st extn. of this group shall ring. If 1st extn is busy, then 2nd extn. shall ring and so on. To define these hunting groups , reffer to the prog. manual

30. INTERNET PORT

If you shall be using any Junction for internet, you can temporarily disable the Jn, so that no one can access it. To disable any jn., dial (from dial tone mode)

☞ **168+Jn no. +1**

and to enable it back, dial

☞ **168+Jn no. +2**

31. CLEARING OF USER FEATURE'S

Following features of any extension can be cleared by a single command

Auto call Back
Alarms
Call Forwarding
Follow me
Do not Disturb
Extension ECF

To do so , dial

☞ **100**

32. CENTRAL RINGER

There is a central ringer in the system, which shall ring

i) During an incoming call
ii) When anyone is using ECF/DOSA/Extn. ECF feature
However, if desired you can switch the ringer off for all or any of the above feature. (reffer prog. manual)

33. DO NOT DISTURB

If you do not want to be disturbed during any meeting, dial

☞ **725**

Now anyone calling you, shall get busy tone.

To Cancel DND, dial

☞ **720**

34. FORCED CALL DISCONNECTOR

If desired (and if you know the user password) you can disconnect the external conversation of any extn.

To do so, dial (from user Password)

☞ **87+Extension no.**

35. AUTO CALL DISCONNECTOR

To cut down on your trunk bills you can have an option to either

A) Give only warning beeps after predetermined intervals on either only local or only STD or only on incoming call or on all three types of calls.

B) Disconnect any type of selected call after the warning beep.

The duration for the warning beep is programmable from 010 sec. to 240 sec. and can be set separately for local / STD, ISD / incoming calls.

Refer to programmers guide for setting of above.

The above options can be set separately for each extension.

36. WALK IN CLASS OF SERVICE

To use STD / ISD facility from any non - STD / ISD extension,

Dial

☞ **111 XX YYYY**

Where **XX** = is your extension number
YYYY = is your extension password

Now, you can make one STD / ISD attempt. After dialing above code, the matured call shall be billed to your extn in the ASMDR buffer.

To make another attempt, you shall have to dial in above code again.

NOTE :

Above facility will be functional only after you have changed your extension password from default '1111'.

37. CALL BUDGETING

For an effective management on junction call bills you can set a budget amount for a particular extension. Once that extn. crosses the budgeted amount, his extn. will get locked for ISD / STD calls and will open again only on the 1st of the next month. Alternately, to open his extn. in between the month, set a fresh amount. Refer to programmers guide for setting of fresh amount.

38. TRUNK RESERVATION

One can reserve any junction for any important occasion. To reserve,

Dial

☞ **112 X**

Where **X** = Junction number (1 for 61, 2 for 62...)

Now, only you can access this trunk. To free the junction,
Dial

☞ **112 0**

NOTE:

1.) Above junction will also become free automatically if not used for 3 minutes.

2.) Jn '0' cannot be reserved.

39. ACCEPTED & DENIED TABLE

1. This table of accepted & denied numbers has 10 levels (0 to 9).
2. Each level can have a maximum of 12 accepted numbers and 12 denied numbers (The numbers can be from 1 digit to maximum 14 digits).
3. Any level can be assigned to any extension and an extn. can have seperate levels for day / night mode.

The accepted & denied table shall be as follows.

Level	Accepted group	Denied group
0	XX0, XX1, XX2, ...XX9	YY0, YY1, YY2, ...YY9
1	XX0, XX1, XX2, ...XX9	YY0, YY1, YY2, ...YY9
2	XX0, XX1, XX2, ...XX9	YY0, YY1, YY2, ...YY9
3	XX0, XX1, XX2, ...XX9	YY0, YY1, YY2, ...YY9
4	XX0, XX1, XX2, ...XX9	YY0, YY1, YY2, ...YY9
5	XX0, XX1, XX2, ...XX9	YY0, YY1, YY2, ...YY9
6	XX0, XX1, XX2, ...XX9	YY0, YY1, YY2, ...YY9
7	XX0, XX1, XX2, ...XX9	YY0, YY1, YY2, ...YY9
8	XX0, XX1, XX2, ...XX9	YY0, YY1, YY2, ...YY9
9	XX0, XX1, XX2, ...XX9	YY0, YY1, YY2, ...YY9

Where

XX0... XX9 are ten numbers (max. 14 digits) for accepted group and

YY0...YY9 are ten numbers (max. 14 digits) for denied group.

4. On an outgoing call the system shall compare the dialed number with all programmed allowed / denied numbers of the particular level programmed for this extn. If the dialed number matches or exceeds any of the programmed no., then corresponding action is taken.
5. If the dialed number does not match any of the allowed numbers then the system shall check for the denied group of numbers. If any of the programmed number matches the dialed number, then the dialing is denied.
6. If the dialed number does not match with any number in the accepted or denied group then dialing is allowed.

NOTE:
The system shall compare only the programmed digits with the dialed digits. Once the programmed number of digits tally with the dialed digits, then balance digits are dialed without any check.

Example :-
If 022 is programmed in the allowed group, and 0223 in the denied list, then all numbers exceeding 022 (i.e. 022123..... , 022422.....etc.) will be allowed, except for numbers exceeding 0223.....
Similarly, while checking in the denied list, if the programmed digits fully match with the starting digits of the dialed number, then access is denied.

Default accepted / denied table is as follows

Level	Status
0	only Intercom
1	STD/9 lock
2	ISD lock
3~9	All Allowed

40. HOTEL APPLICATIONS

When an EPABX is used in hotels, it is expected to perform certain additional functions that are specially related to hotel industry. These additional features are guest check-in/check-out, temporary check-in/check-out, guest grouping etc.

40.1 Guest/service group programming

This feature helps to classify guests in different groups and also to define service extn. for each group. Broadly there can be following three types of groups :

1) **Individual guest group** ('0' group) :
   This is the group of individual guests who only need to call service group extensions. These guests cannot dial any other room number.
2) **Guest group** ('1' to '8' group) :
   This is for a group of more than one guests and occupying more than one rooms. These guests can not only call service group extensions but can also call each other.

3) Service group (9 Group) :

This group of extensions includes hotel staff and management. Any extension can call this group and this group can call any other extension.

For assigning of groups refer to programming manual.

40.2 Floor Service destinations

You can set a room service extn. seperately for each floor. Access code for room service for all floors shall be same (default 38), but the ring shall go to corresponding room service extn. depending on the caller's floor.

For example :

If room 210 on second floor calls for room service, ring should go to the room service extension on second floor. Similarly, if room 415 on fourth floor calls for room service, ring should go to room service extension on fourth floor. This helps the hotel management staff to address to guest calls in more efficient and quicker manner. This feature is also known as "floor service". In this,

- Each extn. is assigned a floor group.
- Each group of floors is assigned a service extension and
- Room / floor service access code is defined.
  For this refer prog. manual

40.3 Check-in and Check-out :

Whenever any new guest shall arrive, check-in function is performed to help normal tasks like

- Room status changed to occupied.
- Class of service (ISD/STD/Local) opened as per 94 programming of that extn.
- New account opened for telephone calls.

For check-in,

☞ **Dial user password (by default 89 1111)**

Now,

☞ **Dial 3 ★ 1 - extn. number - 1**

Similarly, when any guest leaves, check-out function is performed to

- Change room status to “not-cleaned”
- Lock extn. for any outgoing junction calls
- ASMDR report with summary of that extn. printed.

For check out

☞ **Dial user password (by default 89 1111)**

Now,

☞ **Dial 3 ★ 1 - extn. number - 2**

40.4 Temporary check-in and check out :

When any guest goes out from hotel during day time, it is desirable to lock his extn. temporarily till he returns. This helps to avoid misuse of ISD/STD/local facility by hotel staff or other guests.

So, when the guest goes out temporary **check-out** function is performed as follows,

☞ **Dial user password (by default 89 1111)**

Now,

☞ **Dial 3 ★ 3 - extn. number - 2**

When the guest returns back in the evening temporary **check-in** function is performed again to restore class of service access on his extension. For this

☞ **Dial user password (by default 89 1111)**

Now,

☞ **Dial 3 ★ 3-extn. number-1**

41. DIRECT INWARD DIALING FACILITY (D.I.S.A)

With the CRYSTAL System, you can set any junction/ junctions for receiving D.I.D. calls (Refer to programming section, for setting D.I.D. Jn.)

41.1 The D.I.S.A. Facility

Whenever there shall be an incoming ring on the D.I.D. junction, the junction shall latch automatically and shall give music tone to the caller for 5 seconds. After that the caller shall get D.I.D. beeps. If in this period the caller dials any extn. no. from his DTMF telephone, the call shall go directly to that extn.

DISA ring is given for 30 sec. If the call is not answered within this time, the ring stops and the call returns to first stage. The caller again gets voice message or music followed by DID beeps after which he can proceed again to try some other extn.

If dialed extn. is busy or any invalid number or no number is dialed during the beeps or voice period, the ring shall go to the round robin group of that jn. and the caller shall get ring back tone, till the call is answered by any extension.

42. DIAL BY NAME

If desired, you can set a 3 digit character for each extn corresponding to the users name of that extn. The incoming caller on DID mode, can directly reach the extn. by dialling these three initials of the required extn user. The character corresponding to the telephone dial pad are -

2 = A,B,C
3 = D,E,F
4 = G,H,I
5 = J,K,L
6 = M,N,O
7 = P,Q,R,S
8 = T,U,V
9 = W,X,Y,Z

To dial by name, on DID beeps or on DID voice prompt, the caller shall dial

☞ **# + 1st three characters.**

A N I

Ex: If the caller dials - # 2 6 4, he shall directly land on extn programmed for ANIL

43. REMOTE DIALING (D.O.S.A.)

Provided you have two or more P&T lines connected to your CRYSTAL system, you can utilize the S.T.D. facility of any P&T line to make an outward call even when you are away from the installed site of the system.

Anyone making a DOSA call should know his extension number and the dynamic lock password of his extension.

To activate remote dialing:

☞ **Dial junction number set for DOSA mode.**

✆ **You shall get music & then DOSA beeps.**

During the beeps, in tone mode

☞ **Dial 1 + Extn No. + Your extn. password**

✆ **You shall get short beeps if your password is correct.**

If the extension number / password is wrong, you shall get error tone for a short while followed by DOSA beeps again. You may now make a 2nd attempt.

☞ **Now take 2nd Jn. by 0/5 or 61/62 etc.**

☞ **Dial external number.**

To disconnect,

☞ **Dial #**

You shall get DOSA beeps & you can proceed again .

During DOSA, after every 30 secs you shall get reminder beeps and after 10 Secs. of the beep, the call will get disconnected. To extend your call, dial any digit from **0-9** after the beep.

To disconnect between 30 secs,

☞ **Dial #**

The 2nd jn. will be released and you shall get acceptance beep again. Now, you can make a new call by dialing 2nd Jn. no. + number. If you do not wish to make a new call

☞ **Dial #** again.

All DOSA calls are given in the print out and are marked with letter "D".

44. VIRTUAL EXTENSION

For PCO applications it is desirable to have additional extensions to be used directly by the clients.

In CRYSTAL system you can have 80 such virtual exten sions starting from **3900 to 3979.**

Each extension can be alloted a 4 digit password. Now, whoever is alloted this extn. no. + password, can make a DOSA call in the normal DOSA call procedure. The call shall be stored in the ASMDR buffer. For extn. password setting, refer to programmers guide.

Example : Suppose password for virtual extension 3900 is set as 5432. Now, any client who is given this extn no. + password can make a DOSA call by **1 + 3900 + 5432.**

45. EXTERNAL CALL FORWARDING

With this facility, whenever there is an incoming call on a Jn. set for ECF mode, the system shall seize that junction plus a 2nd Jn. & dial out the programmed number from the 2nd Junction line. The caller shall first get a ring back tone for 2 sec. followed by music for 5 sec and then he shall be connected to the 2nd junction. Similar to DOSA call, any party can extend the call after 30 sec by dialing any digit from **0 to 9** or disconnect by dialing **#**.

You can also change the external number to be dialed out from the 2nd Jn. from a remote end, as follows

☞ **Dial Jn no. set for ECF mode.**

✆ **You shall get EPABX ring back tone for 3 sec.**

During this ring back tone,

☞ **Dial 1 + users password**

You shall get programming tone.

Now,

☞ **Dial 523 X YYY...#**

Where **X** is 1st Jn line number set for ECF mode
YYY... is the number to be dialed through second jn.

To disconnect,

☞ **Dial #**

46. FLEXIBLE NUMBERING

You can allocate any 1,2,3, or 4 digit number to any extension.

For example: You can programme

☞ **Extn. 201 as 4100**

☞ **Extn. 202 as 5022**

☞ **Extn. 203 as 48 etc.**

Refer to programmers guide for setting of above.

1) Digits 2 & 3, reserved specially for extn. numbers can be used freely.

2) Digits 1, 4, 5 ,6, 7 and 8 are used in feature codes and should therefore be avoided as first digits for office mode, though they can be used.

3) If you programme any extn. with 1st digit same as any feature code, then that feature code will now start with "*".

Example : If you programme any extn. as 41 then call pick-up shall become * 4.
Similarly, if any extn. is set as 629, then jn. numbers

will start with *61, *62, ...
If first digit of any extn. is 1 or 8, then password will be by *89 XXXX.

4) Following extn. numbers are reserved by the system : 39, 399, 3990 to 3999

These can not be assigned to any extn.

5) If you shall be using a mix of 2/3/4 digit nos., then number having starting common digits cannot be assigned to any other extn.

For example : If 2022 is used for one extn., then 202 cannot be used for any other extn. Similarly, if 2102 is used, then 210 or 21 or 2 cannot be used.

6) Same number cannot be assigned to two ports.

7) After setting flexible number, any extn. programming must be done using revised extn. numbers.

47. PAGING

A paging port is provided in the Pigeon system to which you can connect any amplifier input.
To announce through this port

☞ **Dial 3998**

✆ **You shall get ringback tone for 5 sec. and music shall be heard on the paging speakers.**

☞ **Now you can make your announcement**

When paging port is not being used, you may get a slight hum in the paging speakers. You can route the supply wires of the amplifier through the relay port to eliminate the humming.

To make an announcement

☞ **First switch on the relay (by 165).**

☞ **Make your announcement.**

☞ **Switch off the relay (by 166).**

For paging without music , dial

☞ **87**

48. PROGRAMMABLE MUSIC ON HOLD MODULE

In fixed systems you can attach an optional MMOH module in which you can record voice / music of your choice, which shall be replayed whenever an external / internal caller is put on hold.

48.1 Connecting the module

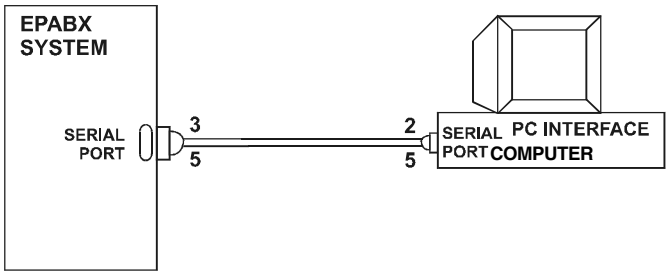
1) Remove the 2 pin shorting cap (Near the music transistor).
2) Connect the 3-pin cable of the MMOH card to the 3-pin connector near the music transistor.
3) Connect the 2-pin connector of the MMOH to any speaker output of a tape recorder with the help of the provided EP cable.
4) Start play back of music from the tape recorder.
5) (a) Press SW1
(b) Now, Press SW2
(c) Release SW2 (keep SW1 pressed).
6) Release SW1 within 55 secs.
7) Remove EP jack.
8) Press and then release SW2 once to reset the I.C.
9) Now try the music on hold.

NOTE :
If the music on hold is of very low volume then record again by increasing the volume level of the tape recorder. If music on hold is too loud & distorted then record again by reducing the volume.

49. COMPUTER CONNECTIVIT

You can connect your EPABX system to a computer, through the serial port as follows :

A) Connect serial port of EPABX to serial port of the computer



B) Set computer parameters as following :

1. Baud rate - 2400
2. Parity bit - None
3. Start bit - 1
4. Stop bit - 1
5. Data bit - 8

C) Switch on to any serial transfer files on your computer like X talk/Procom/Bitcom etc.

Now, whenever you give any print out command, details shall be transferred to the computer.

Pin connections of the 9 pin port is as follows

Pin No.	Specifications
1	+Ve
2	RXD
3	TXD
4	NC
5	GND
6	+Ve
7	NC
8	NC
9	NC

49.1 Check-In / Check-Out through PC.

You can do Check-In / Check-Out through the PC also. To do so, type from Hyperterminal / Procom, type

☞ **F 3 * 1 XXX Y**

Where XXX = extn. no.
Y = 1 for Check-In
2 for Check-Out

If your command is accepted, you will get a **'Y'** display.

To feed in the name of any extn., type

☞ **F 3 * 2 + Extn. No. + Name** and press **Enter**

49.2 Programming through PC.

You can also programme CRYSTAL 40ZX through the PC. To do so, type

☞ **P + Programming Data**

As soon as you type in any complete programming data, you will get a **'Y'** display. You can now type in the next required programming. If you programme in any wrong code, you will get a **'N'** display.

Example :
To allow STD dialling to all extension's, type

☞ **P 94 * 22**

50. EXTENSION ECF

If you shall be going out of your office, you can set as such, that any external call coming on your extension via DID or by Auto CLIP Based Routing, shall be directly forwarded to your new destination number. To do so

1) Programme your desired new destination number on personal memory location **88002**
2) When leaving your table, dial (from dial tone)

☞ **727 (you shall get a broken dial tone)**

Ex. : If you desire your calls to be forwarded on 93230000, dial

☞ **180020 93230000*#**

☞ **727**

Now wherever there is a direct incoming call on your extn, Crystal PBX shall seize a free jn in the '0' group & dial out your new number.

Once you are connected with the caller, you can extend or disconnect the call on DOSA concept.

To cancel, dial

☞ **720**

51. VIRTUAL OFFICE

You can use the 80 Virtual Extensions **(3900-3979)** as virtual office extensions also. Eighty such PBX users can make outgoing calls using the virtual extension number and password alloted to them. To make on outgoing call, dial

☞ **111 + Virtual Extn. No + Password**

Go off-Hook after getting confirmation tone

You can now make one outgoing attempt.

A printout of these calls made by any virtual extn. user can be taken out when desired.

Note : Crystal system shall allow outgoing calls by virtual extension's as per the class of service & Jn access as programmed for extension port **231**.

52. DOOR PHONE

You can attach a Crystal Door phone with Crystal PBX system (An optional Door Phone \ Sensor card attachment is required for this.)

Whenever a visitor shall press the D.P. switch, upto five extensions can be programmed to ring in a rotational / simultaneous pattern. Any ringing extn. going off hook ,shall be connected with the visitor.

The ringing pattern of D.P. ring is different from that of Extn.\Jn. ring.

If you want to connect with the D.P. even when the switch is not pressed, dial from any extn.

☞ **171**

If there is a D.P. ring on any CLIP phone - **" 0008 DOOR PHONE RING "** shall be displayed . If desired , you can change this display message to any other desired name (reff. prog manual)

53. SECURITY SENSOR

If the above (D.P.\ Sensor) card is installed, you can install a sensor with the Crystal PBX system. Whenever there is panic situation and the sensor is activated, crystal PBX shall dial out any of the free 1st three numbers of global location 88101~88103 .When the called number responds, he shall get a repeated message (as feeded in voice bank 9 of the VDC card) for 45 seconds.

After panic situation is restored, to reset panic, dial from User Password

855

Note :
An optional Auto-Operator VDC card is required for this feature.

To feed in the panic message ,dial (from user P.W)

☞ **721+9+1**

Now you can record a message of 6 seconds

Example:

This is a panic message from ..... Please help immediately.

To have a replay of this message ,dial (from user P.W)

☞ **722 91 and**

☞ **722 92**

54. VOICE FEATURES

A two channel auto operator voice card can be installed in the crystal 40ZX system, for auto guidance of an in-comming caller. Eight guidance massages can be stored in this card as follows.

Message No	Message	Explanation
01	Greeting Message Day (25 sec.)	Day greeting message to an incoming caller
02	Greeting Message Night (25 sec.)	Night greeting message to an incoming coller
03	Alarm message (6 sec.)	Message an extn. user shall get on going off-hook on an alarm call
04	Extn. Busy (6 sec.)	Message to an incoming caller when the dialed extn. is busy
05	Auto redial (6 sec.)	When you set for auto redial, the called person shall get this message until you go off-hook on a Auto Redial maturity ring.
06	No reply (6 sec.)	Message to an incoming caller when the dialled extn goes no-reply
07	Wrong Number (6 sec.)	Message to an incoming caller when he dials any invalid number.
09	Panic Message (6 sec.)	This message shall be played to the called person when panic is initiated

54.1 Suggested Format For Recording For Auto Operator

01- Greeting Day

Welcome to ..... Please dial required extn no. or wait for operator to respond. If you wish to dial by name, dial # and the 1st three initials of the desired person.

02- Greeting Night

Welcome to ..... Sorry we are closed .Our working hour's are 9 am to 5 p.m., Monday to Satarday.

04- Extn. Busy

The extn you have dialled is busy. Please dial any other extn. after the beep ,or wait for operator.

06- No reply

The extn you have dialled is not responding. Please dial any other extn after the beep or wait for operator.

07- Wrong Number

You have dialled an invalid number. Please dial another extn. after the beep or wait for operator.

54.2 Feeding Of Voice Message

To record desired message, dial (from user P.W)

☞ **721 + X 1**

where X= message no (01~07)

Disconnect immeadeatly after your message is complete

To have a replay of above message in the 1st channel, dial

☞ **722 + X 1**

To have a replay of message in the 2nd channel, dial

☞ **722 + X 2**

Note : Though you shall get the same message in 722 X1 and 722 X2, it is advisable that you check all message's in both channels, to ensure that both channels are working properly.

54.3 Sequence to be followed for Auto-Operator

1) Record all five messages
2) Have a replay to confirm proper recording
3) Enable voice guidance and DID feature (reff prog manual)

55. MUSIC OPTION ON RING BACK TONE

If desired ,you can attach an optional music card, and set for this music instead of normal ring back tone.This music shall be played during any extn. to extn. call

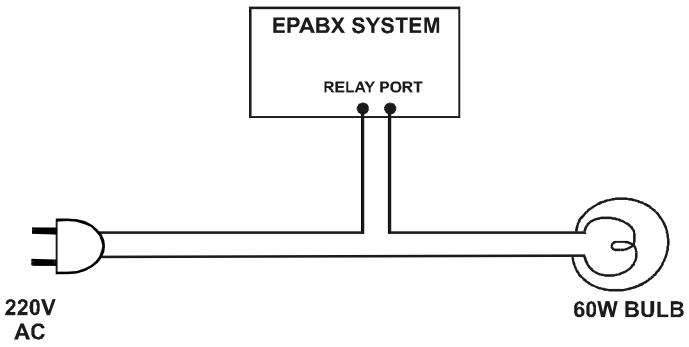
56. FAX HOMING

You can connect a fax machine to any of the extensions of the EPABX. when a Jn. is set for fax mode, during a incoming call, the junction shall be seized automatically & the system shall wait for 6 seconds for fax tone. If fax tone is detected, the call will be forwarded to the corresponding fax extension. If no tone is detected, the call will be transferred to the round-robin group for that junction.

If a voice module is installed,the caller shall first hear the voice announcement.If during this voice period, or within 6 sec. after the voice announcement, the EPABX senses fax beeps,the call will be forwarded to the fax extn.

57. RELAY PORT

A relay port is provided in the CRYSTAL systems which can be programmed to switch ON/OFF any electrical appli ances at predetermined timings. If the appliance consumes less than 0.5 Amp of current (or 100 W power), you can drive it directly, and if it consumes more, you can drive it through an external relay/contactor.



To switch **ON** relay,

Dial (from dial tone)

☞ **165**

and to switch **OFF,**

Dial

☞ **166**

To set relay in auto mode, (from user prog. mode)

Dial

☞ **854 3**

For auto mode, up to 24 sets of timings can be programmed for the relay to switch ON/OFF automatically. For setting of timings, refer to programmers guide.

You can also control this relay from a remote end.

To On / Off relay

☞ **Dial the junction set for Dosa mode .**

You shall get Dosa beeps

☞ **Dial 1+ Extension password**

You shall again get beeps if P.W. is correct

Now, dial

☞ **165** for relay on

☞ **166** for relay off

☞ **#** - to come out of DOSA mode

Further , you can also set this relay for door lock operation (Reffer Prog. manual)

When set for this mode, dialling 3991 shall turn the relay ON for 10 sec then again it shall go OFF.

A 2nd relay option is also avialable to manually switch ON/ OFF any appliance. To switch ON, dial (from dial tone)

☞ **175**

To switch OFF , dial

☞ **176**

For click action, dial

☞ **177**

58. THE CLI FACILITY

58.1 Intercom number CLI

You can connect a CLI phone to avail this facility. When there is an incoming ring on your extension, the number and name of the calling extension shall be displayed on the CLI display.

58.2 External number CLI

Provided you have the optional CLI attachment connected to your EPABX , you can get the number of the external caller on your CLI display phone. The number shall be displayed on the 1st extn. of the round-robin group. If the 1st extn does not answer the call and the ring passes on to the next extn, then the number shall again be displayed on the new extn.This pattern shall continue until the call is answered.

Further, when any incoming call is transferred to a 2nd extn, the incoming number shall again be displayed on that extension.

59. ROOM MONITOR

You can attach two mic's on the Crystal 40KX system to monitor the location where these mic's are installed.

To monitor, from any extension, dial

☞ **164 X**

Where X =1 for 1st mic
2 for 2nd mic

You can also monitor from any remote end. To do so,

☞ **Dial jn. number set for DOSA mode .**

On getting DOSA beeps, dial

☞ **1+ Extn no+ DOSA Password**

Now dial

☞ **164 + 1 or 2**

You can now monitor for 30 secs. To increase this time, dial after the beep

☞ **0 ~ 9 (any digit)**

To disconnect, dial

☞ **#**

Note :
An optional mic interface card is required, for this feature

60. PRINTER SPOOLER

CRYSTAL system has a buffer memory for storage of calls. Once the number of stored calls crosses the warning level, the buffer LED on the front panel starts blinking. The buffer capacity if of 2150 calls. When the buffer is full, it shall glow continuously. Once the buffer is full, the new call shall overwrite the 1st (oldest) call. Following table shows the max. buffer capacity of different models and their respective warning stages, at which buffer LED starts blinking.

Following information is given in each printout :

A) Originating / terminating extension number.
B) Dialed number.
C) Junction number.
D) Time / date / duration of the call.
E) Pulse rate / total units.
F) Amount of the call.
G) Type of call.

A summary is also given at the end of each print out report. If desired one can set to have only the summary instead of a complete report (Refer to programmers guide)

Explanation of the symbols of the last column is as follows :

R = Reversal detection based call maturity
C = ACPD detection based call maturity
D = Delay based call maturity
D = DOSA call
E = ECF call
? = STD code does not exist in the code table
***** = Call duration more than 3 min.
****** = Call duration more than 6 min.

Note :

1) Before starting for storage of P&T calls for the 1st time, first clear printer buffer and STD code table. Refer to programmers guide for details.

2) Due to various parameters taken into consideration by the P&T department (such as number of calls etc), the P&T billing may not match with EPABX 's buffer print out. Crystal assumes no responsibility for such differences.

For various print out options, first enter users programming mode by dialing

☞ **89 1111**

Now for

PRINT OUT OF LAST FEW CALLS

Dial

☞ **7144 XXXX**

where XXXX are the last number of calls

Example : To get a print out of last 100 calls, dial 71140100

DELETING CALLS OF A PARTICULAR EXTN

Dial

☞ **7491 + Extn. Number**

DELETING CALLS OF A VIRTUAL EXTN

Dial

☞ **7493 + Virtual Extn. Number**

PRINT OUT OF CALLS MADE BY AN EXTN. ON A PARTICULAR DATE

Dial

☞ **715 7 DT MM YR + EXTN. NO.**

PRINT OUT OF ALL CALLS,

Dial

☞ **711 0**

SMDR REPORT # : TYPE-WISE LISTING FOR ALL CALLS AS ON 19-05-07 (SAT) AT 16:35

SR	EXT1-EXT2	T	NUMBER	DATE	TIME	DUR	RATE	UNITS	AMOUNT	REM
1	201-201	1	27923985	19-05-07	15:31	33	180.0	1	1.20	d
2	304-207	2	01202456789	19-05-07	15:32	28	8.0	4	6.80	d?
3	227-227	3	0023456789	19-05-27	15:32	19	1.7	1.2	16.40	d?
4	3998-201	1	123567788	19-05-07	15:33	06	**INCOMMING CALL**			
5	3998-304	1	9876543210	19-05-07	15:33	11	**INCOMMING CALL**			
6	201-201	4	022542562568	19-05-07	15:34	21	8.0	3	5.60	d?
7	304-304	1	008956856265	19-05-07	15:34	17	1.7	11	15.20	d?
8	3998-3999	1	01141415252	19-05-07	15:34	0	INCOMMING MISSED CALL			
9	227-227	3	27923766	19-05-07	15:34	35	180.0	1	1.20	d
10	3998-3999	1	01414153	19-05-07	15:35	0	INCOMMING MISSED CALL			
11	201-201	4	005522553668	19-05-07	15:35	20	1.7	12	16.40	d?
12	304-304	1	27921267	19-05-07	15:35	19	180.0	1	1.20	d
13	227-227	2	022546879	19-05-07	15:35	32	8.0	5	8.00	d?
14	3998-304	1	02225633698	19-05-07	15:36	09	**INCOMMING CALL**			
15	3998-3999	1	01147474758	19-05-07	15:36	0	INCOMMING MISSED CALL			

Local	:-	Calls	:3	Time	:	87	Units	:3	Amt:	3.60
STD	:-	Calls	:3	Time	:	81	Units	:12	Amt:	20.40
ISD	:-	Calls	:3	Time	:	56	Units	:35	Amt:	48.00
Total	:-	Calls	:9	Time	:	224	Units	:50	Amt:	72.00

CRYSTAL 40ZX Ver : 2.00

PRINT OUT OF ALL LOCAL CALLS,

Dial

☞ **7111**

SMDR REPORT # 1: TYPE-WISE LISTING FOR LOCAL CALLS AS ON 19-05-07 (SAT) AT 16:34

SR	EXT1-EXT2	T	NUMBER	DATE	TIME	DUR	RATE	UNITS	AMOUNT	REM
1	201-201	1	27923985	19-05-07	15:31	33	180.0	1	1.20	d
2	3998-201	1	123567788	19-05-07	15:33	6	**INCOMMING CALL**			
3	3998-304	1	9876543210	19-05-07	15:33	11	**INCOMMIG CALL**			
4.	227-227	3	27923766	19-05-07	15:34	35	180.0	1	1.20	d
5.	304-304	1	27921267	19-05-07	15:35	19	180.0	1	1.20	d

Local : -	Calls : 3	Time : 87		Units :	3	Amt. :	3.60
STD :	Calls : 0	Time : 0		Units :	0	Amt. :	0.00
ISD :	Calls : 0	Time : 0		Units :	0	Amt. :	0.00
Total :	Calls : 3	Time : 87		Units :	3	Amt. :	3.60

CRYSTAL 40ZX Ver: 2.00

PRINT OUT OF ALL STD CALLS,

Dial

☞ **711 2**

SMDR REPORT # : TYPE-WISE LISTING FOR STD CALLS AS ON 19-05-07 (SAT) AT 15:36

SR	EXT1-EXT2	T	NUMBER	DATE	TIME	DUR	RATE	UNITS	AMOUNT	REM
1	304-304	2	01202456789	19-05-07	15:32	28	8.0	4	6.80	d?
2	201-201	4	0225425625681	9-05-07	15:34	21	8.0	3	5.60	d?
3	3998-3999	1	01141415252	19-05-07	15:34	0	INCOMING MISSED CALL			
4	3998-3999	1	01414153	19-05-07	15:35	0	INCOMING MISSED CALL			
5	277-277	2	022546879	19-05-07	15:35	32	8.0	5	8.00	d?
6	3998-304	1	02225633698	19-05-07	15:36	9	**INCOMMING CALL**			
7	3998-3999	1	01147474758	19-05-07	15:36	0	INCOMMING MISSED CALL			

Local:-	Calls : 0	Time : 0		Units : 0	Amt.:	0.00	
STD:-	Calls : 3	Time 81		Units : 12	Amt:	20.40	
STD:-	Calls : 0	Time 0		Units : 0	Amt:	0.00	
Total:-	Calls : 3	Time 81		Units : 12	Amt :	20.40	

CRYSTAL 40ZX Ver : 2.00

PRINT OUT OF ALL ISD CALLS,

Dial

☞ **711 3**

SMDR REPORT # : TYPE-WISE LISTING FOR ISD CALLS AS ON 19-05-07 (SAT) AT 16:34

SR	EXT1-EXT2	T	NUMBER	DATE	TIME	DUR	RATE	UNITS	AMOUNT	REM
1	227-227	3	0023456789	19-05-07	15:32	19	1.7	12	16.40	d?
2	304-304	1	008956856265	19-05-07	15:34	17	1.7	11	15.20	d?
3	201-201	4	00552255668	19-05-07	15:35	20	1.7	12	16.40	d?

Local:-	Calls:0	Time	:	0	Units	:	0	Amt : 0.00
STD:-	Calls:0	Time	:	0	UnitS	:	0	Amt : 0.00
ISD:-	Calls:3	Time	:	56	Units		35	Amt: 48.00
Total:-	Calls:3	Time	:	56	Units		35	Amt: 48.00

CRYSTAL 40ZX Ver : 2.00

PRINT OUT OF ALL CALLS MADE BY AN EXTENSION,

Dial

☞ **712 XX**

where **XX** is the extn. number

SMDR REPORT # 2: EXTENSION-WISE LISTING OF EXT# 304 AS ON 19-05-07 (SAT) AT 16:35

SR	EXT1-EXT2	T	NUMBER	DATE	TIME	DUR	RATE	UNITS	AMOUNT	REM
1	304-304	2	01202456789	19-05-07	15:32	28	8.0	4	6.80	d?
2	3998-304	1	9876543210	19-05-07	15:33	11	**INCOMING CALL**			
3	304-304	1	008956856265	19-05-07	15:34	17	1.7	11	15.20	d?
4	304-304	1	27921267	19-05-07	15:35	19	180.0	1	1.20	d
5	3998-304	1	02225633698	19-05-07	15:36	9	**INCOMING CALL**			

Local:-	Calls:1	Time	:	19	Units1			Amt : 1.20
STD:-	Calls:1	Time	:	17	Units 4			Amt : 6.80
ISD:-	Calls:1	Time	:	28	Units 11			Amt: 15.20
Total:-	Calls:3	Time	:	64	Units 16			Amt: 23.20

CRYSTAL 40ZX Ver : 2.00

PRINT OUT OF CALLS MADE THROUGH AN JUNCTION,

Dial

☞ **713 + Jn. No.**

SMDR REPORT # 3 : TYPE-WISE LISTING FOR TRUNK # 1 AS ON 19-05-07 (SAT) AT 16:38

SR	EXT1-EXT2	T	NUMBER	DATE	TIME	DUR	RATE	UNITS	AMOUNT	REM
1	201-201	1	27923985	19-05-07	15:31	33	180.0	1	1.20	d
2	3998-201	1	123567788	19-05-07	15:33	6	**INCOMMING CALL**			
3	3998-304	1	9876543210	19-05-07	15:33	11	**INCOMMING CALL**			
4	304-304	1	00895685626	5 19-05-07	15:34	17	1.7	11	15.20	d?
5	3998-3999	1	01141415252	19-05-07	15:34	0	INCOMMING MISSED CALL			
6	3998-3999	1	01414153	19-05-07	15:35	0	INCOMMING MISSED CALL			
7	304-304	1	27921267	19-05-07	15:35	19	180.0	1	1.20	d
8	3998-304	1	02225633698	19-05-07	15:36	9	**INCOMMING CALL**			
9	3998-3999	1	01147474758	19-05-07	15:36	0	**INCOMMING MISSED CALL**			

Local:-	Calls :	2	Time :	52	Units :	2	Amt.: 2.40
STD:-	Calls :	0	Time	0	Units :	0	Amt: 0.00
STD:-	Calls :	1	Time	17	Units :	11	Amt: 15.20
Total:-	Calls :	3	Time	69	Units :	13	Amt : 17.60

CRYSTAL 40ZX Ver : 2.00

PRINT OUT OF CALLS MADE ON A PARTICULAR DATE,

Dial

☞ **714 Date month year**

SMDR REPORT 4 : DATE-WISE LISTTING FOR 19-05-07 AS ON 20-05-07 (SUN)AT 09:40

SR	EXT1-EXT2	T	NUMBER	DATE	TIME	DUR	RATE	UNITS	AMOUNT	REM
1	201-201	1	279239585	19-05-07	15:31	33	180.0	1	1.20	d
2	304-304	2	01202456789	19-05-07	15:32	28	8.0	4	6.80	d?
3	227-227	3	0023456789	19-05-07	15:32	19	1.7	12	16.40	d?
4	201-201	4	02254256256	8 19-05-07	15:34	21	8.0	3	5.60	d?
5	304-304	1	00895685626	5 19-05-07	15:34	17	1.7	11	15.20	d?
6	227-227	3	27923766	19-05-07	15:34	35	180.0	1	1.20	d
7	201-201	4	00552255366	8 19-05-07	15:35	20	1.7	12	16.40	d?
8	304-304	1	27921267	19-05-07	15:35	19	180.0	1	1.20	d
9	227-227	2	022546879	19-05-07	15:35	32	8.0	5	8.00	d?
10	201-201	1	34	19-05-07	18:48	72	180.0	1	1.20	d

Local:-	Calls :	4	Time :	159	Units :	4	Amt.: 4.80
STD:-	Calls :	3	Time	81	Units :	12	Amt: 20.40
STD:-	Calls :	3	Time	56	Units :	35	Amt: 48.00
Total:-	Calls :	10	Time	296	Units :	1	Amt : 73.20

CRYSTAL 40ZX Ver : 2.00

PRINT OUT OF INCOMING CALLS

Dial

☞ **712 3998**

Set for Originating more from main programming for this print out

SMDR REPORT# 2 : EXTENSION-WISE LISTING OF EXT# 3998AS ON 19-05-07 (Sat) AT 16:37

SR	EXT1-EXT2	T	NUMBER	DATE	TIME	DUR	RATE	UNITS	AMOUNT	REM
1	3998-201	1	123567788	19-05-07	15:33	6	**INCOMMING CALL**			
2	3998-304	1	9876543210	19-05-07	15:33	11	**INCOMMING CALL**			
3	3998-3999	1	01141415252	19-05-07	15:34	0	INCOMMING MISSED CALL			
4	3998-3999	1	01414153	19-05-07	15:35	0	INCOMMING MISSED CALL			
5	3998-304	1	02225633698	19-05-07	15:36	9	**INCOMMING CALL**			
6	3998-3999	1	01147474758	19-05-07	15:36	0	INCOMMING MISSED CALL			

Local:-	Calls :	0	Time : 0	Units :	0	Amt.:	0.00
STD:-	Calls :	0	Time : 0	Units :	0	Amt:	0.00
STD:-	Calls :	0	Time : 0	Units :	0	Amt:	0.00
Total:-	Calls :	0	Time : 0	Units :	0	Amt :	0.00

PIGEON CRYSTAL 40ZX Ver : 2.00

PRINT OUT OF INCOMING MISSED CALLS

Dial

☞ **712 3999**

Set for Terminating more from main programming for this print out

SMDR REPORT# 2 : EXTENSION-WISE LISTING OF EXT # 3999 AS ON 19-05-07 (Sat) AT 16:37

SR	EXT1-EXT2	T	NUMBER	DATE	TIME	DUR	RATE	UNITS	AMOUNT	REM
1	3998-3999	1	01141415252	19-05-07	15:34	0	INCOMMING MISSED CALL			
2	3998-3999	1	01414153	19-05-07	15:35	0	INCOMMING MISSED CALL			
3	3998-3999	1	01147474758	19-05-07	15:36	0	INCOMMING MISSED CALL			

Local:-	Calls :	0	Time : 0	Units :	0	Amt.:	0.00
STD:-	Calls :	0	Time : 0	Units :	0	Amt:	0.00
STD:-	Calls :	0	Time : 0	Units :	0	Amt:	0.00
Total:-	Calls :	0	Time : 0	Units :	0	Amt :	0.00

CRYSTAL 40ZX Ver : 2.00

PRINT OUT OF SUMMARY OF CALLS MADE BY EXTN'S

Dial

☞ **715 4**

SMDR REPORT # 10: TOTAL CALL AMOUNT OF ALL EXTS. AS ON 20-05-07 (Sun) AT 10:01:29

Room No.	Amount	Room No.	Amount
201	144.40	202	8.00
203	67.20	204	0.00
205	0.00	206	33.60

PRINT OUT FORMAT DURING CHECK-OUT IS AS FOLLOWS

SMDR REPORT# 9: GUEST CALL REPORT FOR ROOM NO:202 AS NO 20-05-07 (Sun) AT 11:49:41
GUEST NAME : MANOJ Check-In-Out Serial No. : 1
CHECK-IN ON : 20-05-07 AT 09:46:59 CHECK-OUT NO : 20-05-07 AT 11:49:41

SR	EXT1-EXT2	T	NUMBER	DATE	TIME	DUR	RATE	UNITS	AMOUNT	REM
1	202-202	1	0895688	20-05-07	09:50	36	8.0	5	8.00	d?

Local:-	Calls :	0	Time : 0	Units : 0	Amt.:	0.00	
STD:-	Calls :	1	Time : 36	Units : 5	Amt:	8.00	
STD:-	Calls :	0	Time : 0	Units : 0	Amt:	0.00	
Total:-	Calls :	1	Time : 36	Units : 5	Amt :	8.00	

CRYSTAL 40ZX Ver : 2.00

PRINT OUT OF GLOBAL / PERSONAL DIRECTORY

Dial

☞ **716**

GLOBAL DIRECTORY AS ON 20-05-07 (Sun) AT 11:17

GRP.NO.	LOC	TRK	NUMBER	CFEXT.	GRP.NO.	LOC	TRK	NUMBER/NAME	CFEXT.
10	01	1	27923766	201	10	02	2	22792267	202
10	03	1	27949260	203	10	04	3	27923982	201
10	05	2	32905268	203	10	06		SANJAY	
11	01	1	9811114477	205	11	02	4	9811123123	204
11	03	4	9811121221	204	11	04	1	9891112211	204
11	05	4	09897554466	205	11	06		PAWAN	

EXT NO 201 PERSONAL DIRECTORY AS ON 20-05-07 (Sun) AT 11:17

GRP.NO.	LOC	TRK	NUMBER	CFEXT.	GRP.NO.	LOC	TRK	NUMBER/NAME	CFEXT.
01	01	4	456456456	201	01	02	1	07897897898	210
01	03	3	08528528525	207	01	04	2	0852085208	201
01	05	2	32040861	204	01	06		ANIL	

PRINT OUT OF LCR TABLE

Dial

☞ **717 3** (From main password)

SMDR REPORT# 9: LEAST COST ROUTING (LCR) AS ON 2-05-07 (Sun) AT 14:17

LOC.	JN NO.	NUMBER	LOC.	JN NO.	NUMBER
00	1 2 1 2	1	01	1 2 1 2	2
02	1 2 1 2	3	03	1 2 1 2	4
04	1 2 1 2	5	05	1 2 1 2	6
06	1 2 1 2	7	07	1 2 1 2	8
08	1 2 1 2	9	09	3 4 3 4	01
10			11		
12			13		
14			15		

PRINT OUT OF EXTENSION PARAMETERS 1

Dial

☞ **715 21**

EXTENSION PARAMETERS AS ON 20-05-07 (Sun) AT 11:42

EXT NO.	FO DN	F1 DN	TRUNK ACCESS 1 2 3 4 5 6 7 8 9 0 DNDNDNDNDNDNDNDNDNDN	F2	F3	F4	F5	F6	F7F8F9F10F11 DNDNDN	F12 DN	F12 P1	F12 P2	F12 P3	F13	F14	F15	DIR 1 2 DNDN
201	88	33	YYYYYYYYYYYYYYYYYYYY	N	6	1	1111	144	0000000	00	N	Y	N	0	0	N	YYYY
202	88	33	YYYYYYYYYYYYYYYYYYYY	N	6	1	1111	8	0 000000	00	N	Y	N	0	0	N	YYYY
203	88	33	YYYYYYYYYYYYYYYYYYYY	N	6	1	1111	98	0 000000	00	N	Y	N	0	0	N	YYYY
204	88	33	YYYYYYYYYYYYYYYYYYYY	N	6	1	2222	28	0 000000	00	N	Y	N	0	0	N	YYYY
205	88	33	YYYYYYYYYYYYYYYYYYYY	N	6	1	2222	26	0 000000	00	N	Y	N	0	0	N	YYYY
206	88	33	YYYYYYYYYYYYYYYYYYYY	N	6	1	2222	51	0 000000	00	N	Y	N	0	0	N	YYYY
207	88	33	YYYYYYYYYYYYYYYYYYYY	N	6	1		0	0 0 000000	00	N	Y	N	0	0	N	YYYY
208	88	33	YYYYYYYYYYYYYYYYYYYY	N	6	1		0	0 0 000000	00	N	Y	N	0	0	N	YYYY
209	88	33	YYYYYYYYYYYYYYYYYYYY	N	6	1		0	0 0 000000	00	N	Y	N	0	0	N	YYYY
210	88	33	YYYYYYYYYYYYYYYYYYYY	N	6	1		0	0 0 000000	00	N	Y	N	0	0	N	YYYY
211	88	33	YYYYYYYYYYYYYYYYYYYY	N	6	1		0	0 0 000000	00	N	Y	N	0	0	N	YYYY
212	88	33	YYYYYYYYYYYYYYYYYYYY	N	6	1		0	0 0 000000	00	N	Y	N	0	0	N	YYYY
213	88	33	YYYYYYYYYYYYYYYYYYYY	N	6	1		0	0 0 000000	00	N	Y	N	0	0	N	YYYY
214	88	33	YYYYYYYYYYYYYYYYYYYY	N	6	1		0	0 0 000000	00	N	Y	N	0	0	N	YYYY
215	88	33	YYYYYYYYYYYYYYYYYYYY	N	6	1		0	0 0 000000	00	N	Y	N	0	0	N	YYYY
216	88	33	YYYYYYYYYYYYYYYYYYYY	N	6	1		0	0 0 000000	00	N	Y	N	0	0	N	YYYY
217	88	33	YYYYYYYYYYYYYYYYYYYY	N	6	1		0	0 0 000000	00	N	Y	N	0	0	N	YYYY
218	88	33	YYYYYYYYYYYYYYYYYYYY	N	6	1		0	0 0 000000	00	N	Y	N	0	0	N	YYYY
219	88	33	YYYYYYYYYYYYYYYYYYYY	N	6	1		0	0 0 000000	00	N	Y	N	0	0	N	YYYY
220	88	33	YYYYYYYYYYYYYYYYYYYY	N	6	1		0	0 0 000000	00	N	Y	N	0	0	N	YYYY
221	88	33	YYYYYYYYYYYYYYYYYYYY	N	6	1		0	0 0 000000	00	N	Y	N	0	0	N	YYYY
222	88	33	YYYYYYYYYYYYYYYYYYYY	N	6	1		0	0 0 000000	00	N	Y	N	0	0	N	YYYY
223	88	33	YYYYYYYYYYYYYYYYYYYY	N	6	1		0	0 0 000000	00	N	Y	N	0	0	N	YYYY
224	88	33	YYYYYYYYYYYYYYYYYYYY	N	6	1		0	0 0 000000	00	N	Y	N	0	0	N	YYYY
225	88	33	YYYYYYYYYYYYYYYYYYYY	N	6	1		0	0 0 000000	00	N	Y	N	0	0	N	YYYY
226	88	33	YYYYYYYYYYYYYYYYYYYY	N	6	1		0	0 0 000000	00	N	Y	N	0	0	N	YYYY
227	88	33	YYYYYYYYYYYYYYYYYYYY	N	6	1		0	0 0 000000	00	N	Y	N	0	0	N	YYYY
228	88	33	YYYYYYYYYYYYYYYYYYYY	N	6	1		0	0 0 000000	00	N	Y	N	0	0	N	YYYY
229	88	33	YYYYYYYYYYYYYYYYYYYY	N	6	1		0	0 0 000000	00	N	Y	N	0	0	N	YYYY
230	88	33	YYYYYYYYYYYYYYYYYYYY	N	6	1		0	0 0 000000	00	N	Y	N	0	0	N	YYYY

CB : Call Budgeting
ACD : Auto Call Disconnector
D:Day N: Night
1: On 0: Off

F0 : Feature Access Level
F1 : Class of Service
F2 : DOSA
F3 : Flash Timer
F4 : CB On/Off
F5 : CB Proorammed Amount
F6 : CB Current Amount
F7 : CB Lock Level
F8 : ACD For Local Calls
F9 : ACD For STD Calls
F10 : ACD For IC Calls
F11 : ACD Warning Only
F12 : Call Privacies for P1 = IR/BI/Raid, P2 = Trunk Call, P3 = DISA Call
F13 : Call Pick-up Group
F14 : Hunt Group
F15 : Voice Mail Port

PRINT OUT OF EXTENSION PARAMETERS 2

Dial

☞ **715 22**

EXTENSION PARAMETERS2 AS ON 19-05-07 (Sat) AT 16:57

EXT NO.	FLEX#	EXTENSION NAME	GUEST GROUP	FLOOR NUMBER
01	201	ANIL PRAJAPATI	PARTY1	1
02	202	AJAY SHARMA	SERVICE	0
03	203	JOSHI JI	PARTY2	2
04	204	DEEPAK	GUEST	2

PRINT OUT OF SYSTEM PARAMETERS

Dial

☞ **715 1**

Following details are given in this print out

1) All timer setting
2) On line off line
3) Printer setting
4) Relay port setting
5) Auto Day Night Setting
6) Auto redial Setting
7) User password
8) Last buffer clear Date time
9) Record stored in the buffer
10) Record free in the buffer
11) Program last Exited
12) Last loaded Date time
13) Floor service Extn. no.
14) Pilot Group setting
15) Feature table
16) Allowed Denied list

PRINT OUT OF VIRTUAL EXTN. PASSWORD

Dial

☞ **715 8**

VIRTUAL EXTENSION - PASSWORD AS ON 19-05-07 (Sat) AT 17:08

VIRTUAL EXTENSION	PASSWORD	VIRTUAL EXTENSON	PASSOWRD
3900	1234	3901	4321
3902	2222	3903	1111
3904	3333	3905	4444
3906	5555	3907	6666
3908	7777	3909	8888
3910	9999	3911	0000
3912	5678	3913	90*#

PRINT OUT OF ACCEPTED / DENIED TABLE

Dial

☞ **715 6**

SYSTEM PARAMETERS AS ON 19-05-07 (Sat) AT 17:04

Class of Service # 0			Class of Service # 1		
Index	Allowed list	Denied list	Index	Allowed list	Denied list
0	022	0	0		00
1	0794301201	98	1		00
2	95012042	3	2		
3		180	3		
4		95	4		
5		6	5		
6		7	6		
7		8	7		
8		9	8		9
9		0	9		
*		*	*		*
#		#	#		#